

Claims

1. Method for identifying suspected counterfeit and/or counterfeit banknotes (BF) paid into an automatic teller machine (10), wherein banknotes (BN) to be paid in are checked for authenticity on the basis of data from a sensor device (3),  
5 **characterized by**  
linking data from the sensor device (3) for the suspected counterfeit and/or counterfeit banknotes (BF) to an identity of a payer,  
storing the data concerning the suspected counterfeit and/or counterfeit banknotes (BF) and the identity of the payer,  
10 generating checking data for the suspected counterfeit and/or counterfeit banknotes (BF) by means of the sensor device (3) or a sensor device similar to the sensor device (30), wherein checking data are generated by the sensor device (3, 30) for one or more possible positions of the suspected counterfeit and/or counterfeit banknotes (BF),  
15 comparing the checking data with the stored data concerning the suspected counterfeit and/or counterfeit banknotes (BF) and determining the data concerning the suspected counterfeit and/or counterfeit banknote (BF), which has the closest agreement with the respective checking data,  
and  
20 identifying the respective suspected counterfeit and/or counterfeit banknote (BF) using the identity of the payer, which is linked with the closest agreement to the data concerning the suspected counterfeit and/or counterfeit banknote (BF).
2. Method according to Claim 1, **characterized in that** the suspected counterfeit and/or counterfeit banknotes (BF) are processed by means of the banknote processing machine (11) for the generating of checking data in all four positions.  
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3. Method according to Claim 1, **characterized in that** the suspected counterfeit and/or counterfeit banknotes (BF) are processed by means of the banknote processing machine (11), for the generating of checking data in two positions  
30 and that the sets of checking data for the two missing positions are obtained

from the two sets of checking data generated by the banknote processing machine (11).

4. Method according to Claim 1, **characterized in that** the suspected counterfeit and/or counterfeit banknotes (BF) are processed for the generating of checking data in one position by means of the banknote processing machine (11), wherein for each suspected counterfeit and/or counterfeit banknote (BF), two sets of checking data, respectively for the front and rear side are generated, and that the sets of checking data for the two missing layers are obtained from the two sets of checking data generated by the banknote processing machine (11).

5. Method according to any one of the Claims 1 to 4, **characterized in that** an identification number is used for each automatic teller machine (10), said identification number being linked to the data from the sensor device (3) concerning the suspected counterfeit and/or counterfeit banknotes (BF) and that, for the identification of suspected counterfeit and/or counterfeit banknotes (BF), only data concerning suspected counterfeit and/or counterfeit banknotes (BF) which have a particular identification number are compared with the checking data.

6. Method according to any one of the Claims 1 to 5, **characterized in that** data from the sensor device (3) concerning the suspected counterfeit and/or counterfeit banknotes (BF) are linked to additional data concerning the banknotes (BF), for example, denomination and/or position, which were determined during the paying in transaction, and that during identification of suspected counterfeit and/or counterfeit banknotes (BF), only those checking data, which have matching additional data are compared with the data concerning suspected counterfeit and/or counterfeit banknotes (BF).

7. Method according to Claim 6, **characterized in that** the suspected counterfeit and/or counterfeit banknotes (BF) for the generating of the checking data are processed by means of the banknote processing machine (11) in a position, which is given in the additional data.

8. Method according to any one of the Claims 1 to 7, **characterized in that** the data of the sensor device (3) concerning the suspected counterfeit and/or counterfeit banknotes (BF) consist of data from individual or all sensors of the sensor device (3).
- 5 9. Method according to any one of the Claims 1 to 8, **characterized in that** the sensor device (3) for determining the authenticity of the banknotes (BN) detects features that are visible and/or invisible.